

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Market Development Committee Meeting
August 7, 1997

AGENDA ITEM 7

ITEM: CONSIDERATION OF THE METHODOLOGY AND CALCULATION OF THE
PRELIMINARY 1996 AND REVISED 1995 CALIFORNIA
POSTCONSUMER PAPER UTILIZATION RATE

I. SUMMARY

Using the existing method, Board staff calculates that, in 1996, 30.7 percent of the postconsumer paper generated in California was "utilized" (recovered) for recycling or other productive end-uses. This "preliminary"¹ 1996 California postconsumer paper utilization² rate (the rate) fell short of the 1996 non-mandatory goal of 40.5 percent established by the Board on May 26, 1994. Additionally, the preliminary 1996 utilization rate was substantially less than the revised 1995 rate of 34 percent.³ One factor was primarily responsible for the decline in the 1996 rate compared with the 1995 rate: significantly lower recovered paper exports. California exports of postconsumer paper originating in California totaled 1,531,039 tons in 1996, while the same figure in 1995 totaled 1,966,697 tons.

In contrast to lower recovered paper exports in 1996, domestic consumption of California recovered paper increased in 1996 over 1995. In 1996, California's estimated share of postconsumer paper consumption at paper mills in the Mountain & Pacific (M&P) region⁴ totaled 2,531,000 tons (including that consumed in

¹ The calculation of the 1996 rate is based on some unpublished data, and some data which is subject to revision; therefore, the utilization rate is deemed "preliminary."

² "Utilization," in context of the Board's goals, refers to the consumption of postconsumer paper in a variety of end-uses, including alternative end-uses such as compost, cellulose insulation, building materials, and animal bedding. Utilization encompasses both domestic mill consumption and exports. Utilization does not include consumption or exports of preconsumer paper, such as converting scrap or printing waste, nor does it include paper consumed through "transformation" (energy recovery).

³ The "preliminary" 1995 rate, approved by the Board on June 26, 1996, was 31.33 percent; staff revised this rate based on more current data.

⁴ The states in the Mountain & Pacific Region are Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and 48

California) compared with 2,443,276 tons in 1995. Similarly, postconsumer paper consumption at paper mills in California also increased in 1996 (1,925,462 tons) over 1995 (1,898,110 tons).

To more accurately extrapolate California postconsumer paper generation, staff proposes to make a revision to the calculation method, or "formula." The revision would use U.S. "new supply"—rather than U.S. production—of paper and paperboard as a factor for extrapolating California postconsumer paper generation from base year 1990. New supply is a more accurate figure to use since it adjusts for both U.S. exports and imports of paper and paperboard. The revision would slightly lower the 1996 generation figure, and thus increase the 1996 preliminary utilization rate by about four tenths of a percentage point. The revision would also increase previous rates by approximately two tenths of a percentage point.

Staff also proposes to revise the calculations of the 1992-1995 utilization rates for old newspapers (ONP) and old corrugated containers (OCC). The previous calculations used data for "total paper" in further adjusting population-adjusted M&P paper mill consumption of postconsumer ONP and OCC originating from California, rather than using data for ONP and OCC specifically. When the utilization rates are calculated with the correct data, the ONP rate decreases by about 3 to 4 percentage points for each year, and the OCC utilization rate increases by about 3 percentage points for each year.

II. PREVIOUS COMMITTEE ACTION

On December 2, 1993, the Committee (and subsequently the Board) established a non-mandatory goal of 50 percent utilization of postconsumer paper generated in California by the year 2000. The goal was established primarily as an incentive for the U.S. paper industry to increase utilization of postconsumer paper.

On May 16, 1994, the Committee (and subsequently the Board) approved a method to calculate the annual California paper utilization rate and also approved annual utilization goals through the year 2000. In addition, the Committee and Board directed staff to calculate utilization rates annually for old newspapers (ONP) and old corrugated containers (OCC), although there are no established, specific goals for these grades of recovered paper. Finally, the Committee and Board directed staff

Wyoming. Alaska, Nevada, Hawaii, Utah and Wyoming do not have any recycled paper mills. Alaska and Hawaii are precluded from any calculations involving M&P states as they generally ship their recovered paper to foreign countries rather than M&P state paper mills.

to track the amount of postconsumer paper composted in California.

On June 26, 1996, the Committee (and subsequently the Board) approved staff's calculation of the preliminary 1995 California postconsumer paper utilization rate (34.02 percent). The Committee and Board also approved staff's recommendation to preclude preconsumer paper from the 1990 baseline California paper generation figure.

III. OPTIONS FOR THE COMMITTEE

Committee members may decide to:

1. Approve staff's preliminary 1996 California postconsumer paper utilization rate and the revised 1995 rate; approve staff's revised method for calculating annual California postconsumer paper generation; and approve staff's corrections to the 1991-1995 utilization rates for ONP and OCC.
2. Approve one or two of the three items in Option 1, and provide staff with direction regarding the other item(s).

IV. STAFF RECOMMENDATION

Approve Option 1 above.

V. ANALYSIS

Background

The Board established postconsumer paper utilization goals to provide an incentive for the U.S paper industry to increase utilization of postconsumer paper. Because paper is such a large percentage of California's wastestream—28.7 percent⁵ in 1990—the Board believed that the diversion rate for paper would have to be significantly higher than the 1990 rate of 21.4 percent⁶ in order for cities and counties to achieve their 25 percent and 50 percent landfill diversion goals established by Assembly Bill 939 (statutes of 1989, Chapter 1095).

⁵ Per the CIWMB Interim Database, revised October 18, 1993

⁶ See previous footnote

In simple terms, the formula for calculating the annual California postconsumer paper utilization rate is as follows:

California postconsumer paper utilization
California total paper generation.

The annual Board-approved utilization goals are as follows:

| | |
|-------|-------|
| 2000: | 50.0% |
| 1999: | 47.6% |
| 1998: | 45.3% |
| 1997: | 42.9% |
| 1996: | 40.5% |
| 1995: | 38.1% |
| 1994: | 35.8% |
| 1993: | 33.4% |

Recovered Paper Advisory Committee

To develop the method for calculating California's postconsumer paper utilization rate, in 1993 the Board convened a broad-based advisory committee—later named the Recovered Paper Advisory Committee (RPAC). Since approving the calculation method in 1994, the Board has provided RPAC the opportunity to review each of staff's annual calculations of California's postconsumer paper utilization rate—including the 1996 rate—as well as the opportunity to suggest changes to the calculation method.

Findings

1996 Preliminary California Postconsumer Paper Utilization Rate

Using the existing calculation method, staff determined that, in 1996, 30.7 percent of the postconsumer paper generated in California was utilized for recycling or other productive end-uses. This preliminary 1996 California postconsumer paper utilization rate fell below the 1996 goal of 40.5 percent established by the Board. Additionally, the preliminary 1996 rate is less than the revised 1995 rate of 34.02 percent.

One major factor contributed to the decline in the 1996 rate compared to the 1995 rate: significantly lower exports of recovered paper in 1996. California exports of postconsumer paper (originating in California) totaled 1,528,461 tons in 1996 (see Attachment 3, Line 10), while 1995 exports totaled 1,958,127 tons (see Attachment 5, Line 10). The primary reason for the decline in exports was sluggish economic conditions in Pacific Asian countries that rely heavily on California recovered paper to produce paper and paperboard packaging for their own countries and for shipping goods overseas.

- 51 In contrast to the lower 1996 recovered paper export figure, domestic consumption of California postconsumer paper increased in 1996 over 1995. In 1996, California's estimated share of

postconsumer paper consumption at paper mills in the Mountain & Pacific (M&P) region totaled 2,526,739 tons (see Attachment 3, line 5), compared with 2,443,276 tons in 1995 (see Attachment 5, line 5). Similarly, postconsumer paper consumption at paper mills in California also increased in 1996 (1,922,220 tons) over 1995 (1,845,558 tons). (See line 35, Attachments 3 & 5).

Revised 1995 California Postconsumer Paper Utilization Rate

Using revised data updated from that used by staff to calculate the preliminary 1995 utilization rate, staff calculates that the revised 1995 California postconsumer paper utilization rate was 34.02 percent (see Attachment 5, line 15), lower than the preliminary 1995 rate of 34.25 percent. The revised rate is lower than the preliminary figure for two reasons:

1. The revised figure for 1995 total U.S. paper recovery (domestic consumption plus exports)—43,038,700 tons⁷—is lower than the preliminary 1995 figure—43,342,500 tons.⁸
2. The revised 1995 figure for "new supply"⁹ of U.S. paper and paperboard—96,080,000 tons¹⁰—is higher than the preliminary 1995 figure—95,039,000 tons.¹¹ This results in a higher figure for preconsumer scrap generated and recovered, which ultimately lowers the percentage of postconsumer paper recovered. (The aforementioned is true only because the revised 1995 total U.S. paper recovery figure is lower than the preliminary figure, as explained in the previous paragraph.)

One revised statistic used to calculate the 1995 revised utilization rate (and to calculate revised rates for each prior year) kept the rate from falling another 0.35 percent than it would have otherwise. The statistic is 1990 California civilian

⁷ American Forest & Paper Association, 1997 Annual Statistical Summary: Recovered Paper Utilization, April 1997; figure compiled from data on pages 13 and 48.

⁸ American Forest & Paper Association, 1996 Annual Statistical Summary: Recovered Paper Utilization, April 1996; figure compiled from data on pages 13 and 48.

⁹ New supply = U.S. production plus imports, less exports.

¹⁰ Stan Lancey, Director of Economic Studies, American Forest & Paper Association, personal communication, 6-20-97.

¹¹ Ed Zajac, Director, Statistical Programs and Operations, American Forest & Paper Association, personal communication, May 13, 1996.

employment, which the California Employment Development Department revised in 1996. The new statistic (14.319 million) is considerably higher than the old one (13.846 million), which effectively lowers postconsumer paper generation for 1995 (as well as 1992-94).

Proposed Revision to Utilization Rate Formula

Staff proposes to make a revision to the "formula" for calculating the annual postconsumer utilization rate. The revision would be to use U.S. "new supply" of paper and paperboard—rather than U.S. production of paper and paperboard—as one of the four equally-weighted factors for extrapolating California postconsumer paper generation from base year 1990. (The other three factors are California population, California retail taxable sales, and U.S. consumer price index; see step 24 in Attachment 1.) The revision would increase the 1996 preliminary utilization rate by about half a percent.

Using "new supply" rather than production would result in a slightly smaller 1996 California postconsumer paper generation figure, and thus a slightly higher utilization rate. The reason new supply results in a smaller figure is that the ratio between 1996 and 1990 new supply (1.09) is less than the ratio between 1996 and 1990 production (1.14). The ratio between U.S. paper/paperboard production in the "calculation year" and 1990 is used as one of four adjustment factors to extrapolate 1990 California postconsumer paper generation. The higher the factor, the higher the extrapolation. Thus, if using new supply results in a lower adjustment factor, then the extrapolation is also lower.

New supply is a much more accurate figure to use in estimating California postconsumer paper generation than paper production because it adjusts for exports and imports of paper products, whereas paper production does not. Paper production figures include paper produced in the U.S. but shipped out of the country. Such paper typically does not enter the U.S., and so is usually not generated as postconsumer paper in the U.S. If it did enter, it would show up as "imports", which is part of new supply.

When new supply is used to determine California postconsumer paper generation in the formula for calculating the preliminary 1996 utilization rate, the rate increases from 30.67 percent to 31.09 percent. (See line 15, Attachments 3 & 4.) Likewise, if new supply is used in determining postconsumer paper generation for calculating the utilization rates for the years 1992-1995, those rates increase marginally, as illustrated by the following table. (The calculation for 1990 California postconsumer paper generation is not an extrapolation, and thus would not be affected by the proposed revision.)

| | Old Rate Using U.S. Paper Production to Determine Calif. Paper Generation | Revised Rate Using U.S. New Supply to Determine Calif. Paper Generation |
|------|--|--|
| 1996 | 30.67% | 31.09% |
| 1995 | 34.02%* | 34.24% |
| 1994 | 31.64%* | 31.86% |
| 1993 | 26.14%* | 26.30% |
| 1992 | 27.31%* | 27.56% |
| 1990 | 23.45% | no change |

*Revised based on new employment statistics for 1990 and 1992-94. 1995 rate revised based on other more current data as well.

Preliminary 1996 Utilization Rates for Old Newspapers and Old Corrugated Containers

California utilization rates for old newspapers and old corrugated containers both declined in 1996. The ONP utilization rate declined from a revised 1995 rate of 54.45 percent to 48.07 percent. The OCC utilization rate declined from a revised 1995 rate of 55.02 percent to 49.72 percent. (See line 15, Attachments 3 & 5.) [Note: the 1995 revised rates for ONP and OCC were calculated using different (correct) data than used originally. Please see following section titled "Revision to 1992-1995 ONP and OCC Utilization Rates."]

As with the utilization rate for "total paper," a decline in exports of both ONP and OCC was primarily responsible for lowering the 1996 utilization rate. (See line 10, Attachments 3 & 5.) However, California mill consumption of postconsumer ONP in 1996 (336,530 tons)—unlike for total paper and OCC—declined from 1995 (338,528 tons), which also contributed to the lower utilization rate. The reason for this decline was probably due in large part to the fact that ONP consumption by Smurfit Newsprint Corporation's recycled newsprint mill in Pomona—by far California's largest consumer of ONP—declined in 1996 compared with 1995.¹² Smurfit's reduced 1996 ONP consumption resulted from the mill taking "downtime" to reduce newsprint inventory in an effort to bring supply more in balance with demand. In general, publishers of U.S. daily newspapers reduced demand for newsprint in 1996 by "downsizing" their newspapers; 1996

¹² Clark Speiker, General Manager, Smurfit Newsprint Corporation, Pomona mill; personal communication, 7-3-97.

newsprint consumption dropped to 9,638,200 tons from 9,838,400 tons in 1995.¹³

Revisions to 1992-1995 ONP and OCC Utilization Rates

Staff proposes to revise the 1992-1995 utilization rate calculations for ONP and OCC. The revisions would correctly use California and Mountain & Pacific (M&P) region mill consumption figures for ONP and OCC—rather than for total postconsumer paper—in adjusting M&P paper mill consumption of ONP and OCC to California (following population-based extrapolation). (See line 5, Attachments 4 & 6.) The revisions would also use 1990 ONP and OCC generations figures calculated with 1990 U.S. new supply rather than U.S. paper and paperboard production. (See "Proposed Revisions to Utilization Rate Formula", page 5.) The revisions would decrease the ONP utilization rates by about 3 to 4 percentage points for each year the Board has calculated them, and increase the OCC utilization rates by about 3 percentage points for each year. See the following table.

| CALIFORNIA ONP & OCC UTILIZATION RATES, 1990-1996: EXISTING AND REVISED USING CORRECT DATA AND NEW SUPPLY FOR DETERMINING PAPER GENERATION | | | | |
|---|-----------------|----------------|-----------------|----------------|
| | ONP | | OCC | |
| | Existing | Revised | Existing | Revised |
| 1996 | na | 48.73% | na | 50.40% |
| 1995 | 58.62% | 54.80% | 51.63% | 55.37% |
| 1994 | 53.17% | 50.57% | 45.54% | 49.24% |
| 1993 | 53.28% | 49.64% | 38.15% | 41.38% |
| 1992 | 53.14% | 49.22% | 38.97% | 41.37% |
| 1990 | 34.80% | 34.82% | 36.87% | 36.98% |

The results of using the correct data to re-calculate California's ONP and OCC utilization rates are predictable: the ONP utilization rate goes down, and the OCC utilization rate goes up. The lower revised ONP utilization rate makes sense because California has only one newsprint mill in the state, while there are several recycled newsprint mills in the M&P region that consume large quantities of ONP. (Many California recycled paper mills other than the one newsprint mill use ONP as feedstock, but these mills do not consume nearly the amount of ONP that recycled newsprint mills do.) Thus, relative to the state's population,

California mills consume less ONP than do all mills in the M&P region relative to the population of the M&P region states.

The higher revised OCC rate makes sense because California paper mills—relative to the state's population—consume more OCC than do all mills in the M&P region—relative to the population of M&P region states. This is true because California has a large number of recycled paperboard mills that consume OCC primarily.

Key Issues

Lower Exports Lead to a Lower Utilization Rate in 1996 than 1995

As previously mentioned, a significant downturn in California exports of recovered paper in 1996 compared with 1995 was primarily responsible for lowering the 1996 postconsumer paper utilization rate. 1996 California exports of postconsumer paper (originating in California) totaled 1,531,039 tons, compared with 1,958,127 tons in 1995.

It should be noted that, while 1996 California recovered paper exports were low compared with 1995 exports, 1996 export tonnage was not particularly low historically. California and the rest of the U.S. experienced a landmark year for recovered paper exports in 1995, owing in large part to the onset of considerable new recycling capacity in both the U.S. and Asia concurrently. Every previous year's export statistics pale in comparison to 1995, as do those for 1996. The following table reflects just how high 1995 exports were compared with other years, and also illustrates that 1996 exports were fairly typical of the last several years.

| CALIFORNIA POSTCONSUMER RECOVERED PAPER EXPORTS, 1991-1996 (short tons) ¹⁴ | | | |
|--|-----------|-------------|-----------|
| 1996 | 1,996,800 | 1993 | 1,685,300 |
| 1995 | 2,572,500 | 1992 | 1,900,100 |
| 1994 | 2,070,300 | 1991 | 2,053,500 |

The primary reason that California's recovered paper exports declined in 1996 was that the economies of many Pacific Asian countries—Korea and China in particular—slowed considerably. The vast majority of California's exported recovered paper is shipped to Asian countries. Without strong demand for paper products and packaging from customers in their own countries, Asian paper mills slowed production, and thus their demand for

¹⁴ U.S. Dept. of Commerce, Bureau of Census; reported in American Forest & Paper Association in 1997 Annual Statistical Summary: Paper Utilization, April 1997; figure derived.

recovered paper feedstock diminished. Most Asian paper mills were reportedly running at less than 75 percent throughout much of 1996.

Mountain & Pacific Mill Postconsumer Paper Consumption Grows

In spite of the reduction in the 1996 California postconsumer paper utilization rate, 1996 M&P region mill consumption of all postconsumer paper originating from California (2,526,739 tons) actually increased over the 1995 level (2,443,276 tons). (See line 5, Attachments 3 & 5.) The foregoing fact underscores the influence that lower exports had on causing the 1996 utilization rate to decrease. If California's 1996 postconsumer recovered paper exports had remained at the 1995 level, the 1996 utilization rate would have been 33.86 percent, only slightly less than the revised 1995 rate (34.02 percent). (The 1996 rate would still be lower than the 1995 rate due to increased postconsumer paper generation in 1996.)

California's 1996 paper recovery scenario mirrored that of the U.S. overall. In 1996, U.S. recovery of paper (domestic mill consumption plus exports) declined by nearly 67,000 tons: from 42,540,800 tons in 1995 to 42,273,300 tons.¹⁵ However, as with California, domestic mill consumption of recovered paper increased in 1996: 34,289,000 tons compared with 31,391,000 tons in 1995.¹⁶

Utilization of Postconsumer Paper to Produce Alternative Products (Including Compost)

Staff estimates that in 1996, approximately 123,772 tons of California postconsumer paper—mostly ONP—was used to produce alternative products such as cellulose insulation, building products, animal bedding, and compost. The 1996 estimate is higher than the 1995 revised estimate of 117,670 tons.

While some postconsumer paper other than ONP is used to produce alternative products, for calculation purposes all paper used to produce alternative products is classified as ONP. This is due to the nature of the data used for the calculation. The California figure is extrapolated from the U.S. figure—compiled by the American Forest & Paper Association—which classifies all recovered paper used for alternative products as ONP.

Figures are not available on the respective amounts of recovered paper used in various alternative products. AF&PA does not characterize utilization of recovered paper in alternative products by end-use, although AF&PA did perform such a

57 ¹⁵ American Forest & Paper Association, *Annual Statistical Summary: Recovered Paper Utilization*, April 1997, page 81.

¹⁶ *Ibid.*

characterization in 1990. While staff previously used the 1990 U.S. characterization to estimate alternative product end-uses of recovered paper in California, the characterization is too outdated to be useful now.

As in past years, staff was not aware of any significant quantities of recovered paper used to produce compost in California for 1996. Demand for and availability of organic material such as yard trimmings to produce compost grew significantly during 1996 and continues to grow, so it is unlikely that there will be much increase in demand for recovered paper to produce compost in 1997.

Summary of Utilization Goals and Rates, 1990-1996

The following table summarizes the 1993-1996 California postconsumer paper utilization goals, preliminary 1996 utilization rates and revised 1990-1995 utilization rates for total paper, ONP, and OCC. All rates for ONP and OCC use the corrected data described previously.

| | Utilization Goal: Total Paper | Utilization Rate: Total Paper | Utilization Rate: ONP | Utilization Rate: OCC |
|-------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1996a | 40.5% | 30.67% | 48.07% | 49.72% |
| 1996b | 40.5% | 31.09% | 48.73% | 50.4% |
| 1995a | 38.1% | 34.02% | 54.45% | 55.02% |
| 1995b | 38.1% | 34.24% | 54.8% | 55.37% |
| 1994b | 35.8% | 31.86% | 50.57% | 49.24% |
| 1993b | 33.4% | 26.3% | 49.64% | 41.38% |
| 1992b | n/a | 27.56% | 49.22% | 41.37% |
| 1990 | n/a | 23.45% | 34.82% | 36.98% |

a = generation extrapolated with U.S. production paper/paperboard
b = generation extrapolated with U.S. new supply paper/paperboard

Evaluation of the 1996 Preliminary California Postconsumer Paper Utilization Rate

The primary purpose for calculating an annual California postconsumer paper utilization rate is to assess whether or not paper utilization is progressing at a sufficient rate to help California cities and counties achieve their current landfill diversion goal of 50 percent by the year 2000.

As previously mentioned, a significant decline in exports was the primary factor for the 1996 California postconsumer utilization rate decreasing from the 1995 rate. Board staff recognizes that

the U.S. paper industry has little or no control over the swings in export markets for recovered paper. California continues to be strongly dependent on overseas markets to consume recovered paper.

In 1996, overseas markets consumed 36.6 percent of California's postconsumer paper recovery. While Pacific Asian countries are expected to continue adding new recycling capacity in the near future, whether or not that capacity is put into production will be dependent on the economic vitality of those countries and of their trading partners (especially the U.S). Furthermore, many Pacific Asian countries (notably Korea) have recently launched successful programs to boost recovery of the paper that they generate, reducing their need to import recovered paper from California and the rest of the U.S.

While lower 1996 California exports were the primary factor for the 1996 postconsumer paper utilization rate declining from 1995, it deserves repeating that even if 1996 exports had remained at the high 1995 level, the 1996 utilization rate would still have been less than the 1995 rate, and would still have been over 6.5 percentage points less than the 1996 goal.

California Paper Recovery Compared with U.S. Paper Recovery

In contrast to California's 1996 postconsumer paper recovery rate declining, the U.S. paper recovery rate (including preconsumer paper) increased in 1996 (44.8 percent) over 1995 (44.3 percent).¹⁷ This was true despite the fact that U.S. exports of recovered paper (including preconsumer) declined by 31 percent. A nine percent increase in U.S. mill consumption of recovered paper, however, more than made up for the decline in exports.

There are two reasons that California's 1996 paper utilization (recovery) rate declined while the U.S. rate went up: first, postconsumer paper consumption at Mountain & Pacific paper mills originating from California rose only 1 percent in 1996, while recovered paper consumption at all U.S. paper mills increased by nine percent. Second, although California's 1996 exports declined less from 1995 (down 22 percent) than did total U.S. recovered paper exports (down 31 percent), California is much more dependent on foreign markets to consume its recovered paper than is the U.S. In 1996 (as mentioned earlier), exports accounted for 36.6 percent of California's postconsumer paper recovery, while exports accounted for only 17 percent of U.S. paper recovery.¹⁸

¹⁷ American Forest & Paper Association, *Annual Statistical Summary: Recovered Paper Utilization*, page 81, April 1997.

¹⁸ See previous footnote. Figure derived.

Projections for 1997 California Postconsumer Paper Utilization Rate

Most distinguished recovered paper analysts project 1997 to be a stronger year for paper recovery than 1996. There are two main factors behind the optimistic forecasts: continued growth in U.S. paper recycling capacity (primarily for OCC) and stronger overseas recovered paper exports. *Paper Recycler*,¹⁹ a prominent trade journal, surveyed eight recovered paper market experts to assess their forecasts of U.S. recovered paper markets in 1997. On average, the experts projected that U.S. paper mill consumption of recovered paper would increase 3.2 percent and that U.S. recovered paper exports would increase 15.1 percent, for an overall 6.2 percent increase in paper recovery.

If 1997 U.S. paper mill consumption and exports were to match the recovered paper analysts' projections just stated, and if Mountain & Pacific region mills' recovered paper consumption and California recovered paper exports were to match the projected growth for the U.S., then California's postconsumer paper utilization rate would increase from 31.14 percent in 1996 to 33.46 percent in 1997. This would still leave the utilization rate nearly 9.5 percent lower than the 1997 goal of 42.9 percent.

While there is a good possibility that California's postconsumer paper utilization rate for 1997 will increase, there are still a number of variables that could hinder such an increase. Notable among these potential factors are:

- Reduced paper recovery programs, both commercial and residential.
- Increased generation of paper.
- Continued weak business demand for paper/paperboard, particularly for corrugated container packaging and newsprint.
- Continued weak economies in Pacific Asian countries.

The first variable just noted is potentially the greatest obstacle to increasing postconsumer paper utilization. In 1996, a number of paper companies and refuse haulers downsized their paper recovery operations in response to reduced market demand for recovered paper. In addition, a few large East Coast municipal curbside collection programs either eliminated ONP from their programs (e.g., Pittsburgh, PA) or ceased to operate at all (e.g., Washington, D.C.). It is unlikely that any California municipal curbside recycling programs will eliminate ONP or cease to operate, given the need to achieve statewide waste diversion goals. However, private paper recycling operations are driven by market forces, and if demand for recovered paper does not warrant commercial recovery programs (such as office paper collection), they most likely will cut those programs. If markets

¹⁹ January 1997 issue.

subsequently improve, a gap may exist between demand for and supply of recovered paper that will likely take more than a year to close.

RPAC Comments on Staff's 1996 Utilization Rate Calculation and Proposed Changes to the Calculation Method

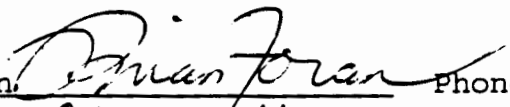
As of the date this agenda item was printed, Board staff had only received comments from one RPAC-related party on staff's calculation of the 1996 California postconsumer paper utilization rate and the proposed changes to the calculation method. The comments were made on behalf of the American Forest & Paper Association by Kris Kiser, AF&PA's Senior Director of Governmental & External Affairs. [Note: Mr. Kiser is not an RPAC member, but AF&PA is represented on RPAC through Kathy Lynch, their California legislative advocate.] Mr. Kiser's comments are provided in Attachment 11.

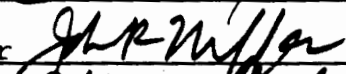
IV. ATTACHMENTS

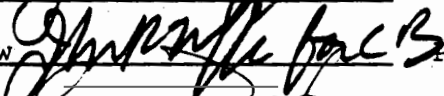
1. Step-by-Step Calculation of Preliminary 1996 California Postconsumer Paper Utilization Rate
2. Step-by-Step Calculation of Preliminary 1996 California Postconsumer Paper Utilization Rate *Using U.S. New Supply of Paper & Paperboard to Extrapolate 1996 Postconsumer Paper Generation*)
3. Preliminary 1996 California Postconsumer Paper Utilization Rate *Using U.S. Production Paper/Paperboard to Extrapolate Generation* (data spreadsheet)
4. Preliminary 1996 California Postconsumer Paper Utilization Rate *Using U.S. New Supply Paper/Paperboard to Extrapolate Generation* (data spreadsheet)
5. Revised 1995 California Postconsumer Paper Utilization Rate *Using U.S. Production Paper/Paperboard to Extrapolate Generation* (data spreadsheet)
6. Revised 1995 California Postconsumer Paper Utilization Rate *Using U.S. New Supply Paper/Paperboard to Extrapolate Generation* (data spreadsheet)
7. Revised 1994 California Postconsumer Paper Utilization Rate (data spreadsheet)
8. Revised 1993 California Postconsumer Paper Utilization Rate (data spreadsheet)
- 61 9. Revised 1992 California Postconsumer Paper Utilization Rate (data spreadsheet)

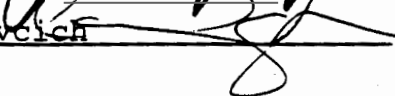
10. 1990 California Postconsumer Paper Utilization Rate (data spreadsheet)
11. Letter to Paul Relis from Kris Kiser, American Forest & Paper Association

VII. APPROVALS

Prepared by: Brian Foran  Phone: 255-2467

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